

scheelite industry, and brought back with him a new Woodbury shaking-table, which has been installed in place of the Frue vanner formerly in use. The sample of scheelite which comes off this table is of very fair quality, and with slight improvements Messrs. Donaldson expect to obtain good results from it. One advantage is that a larger quantity of material can be treated."

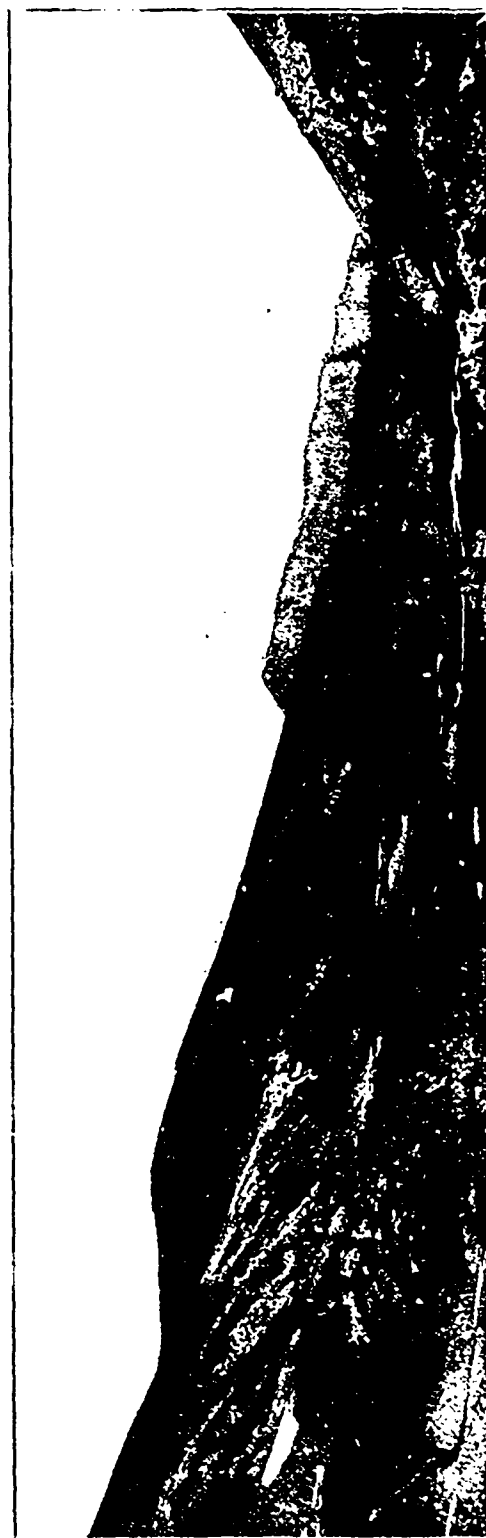
In 1902, replying to a New Zealand correspondent, who reported having "a 4-ft. quartz lode that, in addition to about 0.65 gold per ton, carries about 23 to 25 per cent. scheelite. It is possible to grade the ore up to 70 or 75 per cent. of scheelite, which again on assay yields 78 to 81 per cent. of tungstic acid," the *New York Engineering and Mining Journal* stated that "there is no demand for scheelite in New York as other ores of tungsten are preferred by buyers. In would not pay to ship this ore from New Zealand to the United States, as already there is more tungsten ore there than can be used. There is some demand for scheelite in Great Britain and Germany, so possibly a market could be found there." Later the Tungsten & Rare Metals Company, of London, England, wrote to that journal: "We think it may be of interest to your correspondent to learn that the price paid for scheelite ore, f.o.b. Hamburg or London, has recently been between six shillings and seven shillings (\$1.50 and \$1.75) per unit of tungsten trioxide contained in the ore. The ore should contain about 65 to 70 per cent. tungsten trioxide, and be as free as possible from any injurious constituents, such as sulphur, phosphorus, tin, etc. The makers of Tungsten metal give the preference to wolfram, and also hubernite, as these two minerals afford advantages in manufacture. On the other hand, a good scheelite can be utilized for the manufacture of sodium tungstate, for which a good demand has sprung up of late. With regard to tungsten, we think we are correct in stating that tungsten for the manufacture of self-hardening tool steel (by far the greatest outlet for the metal) is generally preferred in the metallic state, in the form of a fine uniform powder testing from 95 to 98 per cent. metallic tungsten. The present price in England is about £160 (\$800) per ton."

THE PAYNE MINE.

MANAGER'S REPORT.

Brief mention was made in last month's issue of the *Mining Record* to the annual meeting of the Payne Company. We have since received a copy of the manager's report from which the following information is taken. After referring to the development work of the year, which resulted most satisfactorily, Mr. Garde in this report makes the following comparative statements: There were milled last year 64,548 tons of galena or 205 tons per 24 hours, against 30,028 tons, of 101 tons per 24 hours last year, an increase of 45 tons per 24 hours. Of the above total, 5,086 tons was concentrating ore, while the balance consisted of old dumps and fillings. Last year the concentrates averaged 69 per cent. lead with 103.8 ounces silver, while this year the average has been 68.8 per cent. lead with 129 ounces silver. This is an improvement of considerable importance, when considering that the mill tailings assayed less than $\frac{1}{2}$ of 1 per cent. lead and one ounce silver. The average price per ounce of silver was 56 $\frac{1}{2}$, or 71 $\frac{1}{2}$ cents higher than

the previous year's average. On the other hand the average price of lead dropped from \$1.63 to \$1.48 per cwt. A total of 1,105 tons of zinc, plus 140 tons of an iron by-product was produced during the year, a total value of \$13,479. Seven hundred tons of this represented separated zinc-blende,



No. 1 tunnel. No. 2. No. 4.

View down Basin, Paradise Mine—Windermere, N.E. Kootenay. (See article page 286.)

and 600 tons of this ore together with 250 tons of 43 per cent. concentrates were sold. The raw zinc ores after magnetic separation are brought up to a shipping grade of 53 per cent, carrying from 10 to 12 ounces in silver. A favorable contract for the entire output up to January 1st, 1905, has been